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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,873	10/10/2001	Syuji Tsukamoto	107292-00028	5589

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2653

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/972,873

Applicant(s)

TSUKAMOTO, SYUJI

Examiner

Aristotelis M Psitos

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Applicant's response of 6/17/04 has been considered with the following results.

#### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Response to Arguments***

Applicant has not given any argument with respect to the above objection. The examiner maintains such. Applicant's attention is drawn to MPEP § 606.01 and the examiner ability to change the title at the time of allowance by examiner's amendment.

#### ***Claim Objections***

Claims 1-3 are objected to because of the following informalities:

In claim 1, lines 1-3 recite a product, yet the ultimate paragraph adds no limitations to the product, but is written to designate a desired result during a possibility, during a writing step/procedure. The dependent claims fail to clarify the above.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

1. Claims 1-3, & 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohno et al.

The Ohno et al reference is the US equivalent to the WO reference relied upon in the submitted search report. The examiner is only focusing on the US document, but of course the WO document also meets the claimed limitations.

Claim 1 is drawn to a record having structure as defined and wherein multi-stage (5) reflectance levels are found. This is found in the US patent – see the analysis with respect to the parallel WO document in the submitted search report. Furthermore, applicants' attention is also drawn to figures 15-22 and the multi-level reflectances depicted therein.

Claim 7 is drawn to the method and such is accomplished when the Ohno system operates.

With respect to claims 2 & 3 as well as method claims 8 & 9, as noted in the submitted search report, these limitations are present. Hence the examiner supports the position taken by the EP office.

#### ***Response to Arguments***

2. Applicant's arguments filed 6/17/04 have been fully considered but they are not persuasive. The examiner regrets failing to further articulate the position against the claims, nevertheless as analyzed in the submitted EP report, and as stated in the above position, the elements are indeed found.

The examiner did and has reviewed the claims in applicant's corresponding EP document (1 197961A1), and found the claims as originally present to closely follow (identical) with the US application claims. Applicant has amended the claims in the above communication; however, the positions are still maintained. The following analysis is proffered for applicant's review:

Claim 1	Ohno document
An optical recording medium, including a reflective layer and a recording layer .....	See the description of figure 10 (as noted in the EP search report) and as further discussed

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0142 which describes both the recording and reflective layers

the recording layer being continuously formed    see paragraphs 0097 – 0100 as stated in the  
in a relative moving direction to the laser beam    search report, and the corresponding us patent  
with plural virtual recording cells, each of    equivalent disclosure  
which have an arbitrary unit of length and a unit  
width perpendicular to the unit length in the  
relative moving direction,

-- the ultimate paragraph ----    see paragraphs 0115-0121 as stated in the  
search report and the corresponding US patent equivalent disclosure  
as well as the noted figures 15-22 and associated disclosure thereto.

The examiner interprets this claim to be drawn to a product, having the recording and reflecting layers. Such are met by the document.

Lines 4-14 are interpreted as desired results, which follow from the claimed positive limitations. The examiner has concluded that such desired results flow/are met by the above noted document as further discussed analyzed above.

Applicant further argues, that there is no disclosure with respect to reduction of the optical reflectance of the virtual recording cell by more than 50% with respect to an initial reflectance. The examiner respectfully disagrees – see the description with respect to paragraph 0121 for instance in the EP document and equivalent disclosure in the US patent equivalent. Furthermore, reviewing figures 11-22 the examiner notes that the reflectance level is reduces accordingly over the duration desired. With respect to the argument focusing upon an initial reflectance, such is considered the starting point, i.e., when the system begins to record information, as noted in the above figures level 0. By the time the recording is finished, note the level of the reflectance (last level).

With respect to the argument of "continuously formed" in a relative moving direction, the examiner concludes that such is inherently present, i.e., the recording layer is physically placed upon a recording

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medium appropriately and hence the recording layer is indeed continuously formed in a relative moving direction to the laser light beam. That the material is different i.e., the disclosed dye vs. an amorphous/crystalline material is not needed by the reference since such is not claimed.

The dependent claims and the method claims are met as previously stated and since applicant has not argued against these individually no further rebuttal is necessary.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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3. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 1 above, and further in view of JP 02-278535.

The JP document is relied upon for the reasons stated in the submitted search report.

It would have been obvious to modify the base system of Ohno with the above organic dye teaching of the JP document, motivation is to use existing recording materials in the environment and hence save valuable time in reestablishing recording protocols/times/values for new materials.

***Response to Arguments***

Applicant's arguments filed 6/17/04 have been fully considered but they are not persuasive. Applicant's arguments focus upon the deficiencies of the secondary reference with respect to the continuously formed recording layer and the reduction in the reflectance level. The secondary reference was not relied upon for such. As far as the arguments focus upon the teachings of the secondary reference they are not persuasive. The rejection is maintained.

4. Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by WO 200127917.

With respect to the WO document, the examiner is submitting the equivalent EP document 1 235 210, which is being relied upon as an English equivalent. The examiner refers to the EP document and sections thereof for the following analysis. The WO/EP document discloses an optical recording method irradiating a laser beam. The recording medium includes a recording and reflecting layer – see the description starting at paragraph 15 in the EP document for instance and continuing till paragraph 79 (figures 1 and 3). The particular layers are further elaborated upon starting in paragraph 27. The reduction in the reflectance levels is further elaborated upon with respect to figure 5.

With respect to claim 8 – see the description commencing at paragraph 16.

With respect to claim 9, see the description with respect to table 4.

With respect to claim 10, see paragraph 13 for instance.

With respect to claim 11, the determination of a reference power is the final outcome of the desired method for recording – i.e., the disclosed relationship in paragraph 15.

With respect to claim 12, see paragraph 17 for instance.

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With respect to claim 13, see the requirement at page 30, last paragraph, or paragraphs 86-87.

With respect to claim 14, see the requirements of table 3 and the associated disclosure.

With respect to claim 15, the examiner interprets paragraph 136 to meet such.

With respect to claim 16 –17 see the description with respect to example 14 – starting at paragraph 219.

With respect to claims 18-20, see the description of the virtual cells through out the document.

With respect to product claim 1, the record medium has a reflective and recording layer – see the description of the record medium starting at paragraph 13 and continuing to paragraph 30 for instance.

As discussed therein, virtual cells are provided for and a continuous recording layer is continuously formed as claimed.

The reflectance is appropriately changed.

With respect to claims 2 and 3 – see the above discussion with respect to claims 8 and 9.

With respect to claims 4,5 and 6 – such is disclosed.

#### **ERRATA**

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The examiner notes that the above noted WO document raises questions under 35 USC 102 (f), and has a common assignee.

In response to this requirement, please provide a concise explanation of any reliance placed on the above publication in drafting the claimed subject matter, how such matters distinguishes thereover and whether the inventive entity of the present claims need to be aligned with those of the above WO document.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56.



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This requirement is part of the Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

**Conclusion**


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aristotelis M. Psitos AU 2653